Examiner rejected claims 1-8 under 35 USC 103 as being unpatentable over Spira, Galindo, and Nilssen '318 and '525.

Applicant traverses these rejections for the following reasons.

(a) In support of his rejection, Examiner states that:

"It would have been obvious ... to incorporate track means in the circuit disclosed by Spira et al since the length of the tracks would permit their use".

This statement is not appropos.

Clearly, Spira's lighting system is adapted to power plural lighting fixtures in a lighting system. In this lighting system, power would be distributed by a pair of conductors — such as that described by Spira in his Fig. 2, or — if the distances be short — by "any desired connection".

Examiner takes the position that, because Spira indicates that any connection means can be used, it would be obvious to use a power track, such as that of Galindo. However, even if a power track could be used, it is far from obvious that it would be used by anyone classifiable as a person having ordinary skill in the art pertinent hereto. Quite the contrary: it would be utterly unusual to distribute power from a central inverter to various lighting fixtures -- especially if these were all located only a short distance away from this central inverter -- by way of a power track. If some artisan were in fact to do so, in the absence of some very particular reason therefor, he would be considered by persons skilled in the art as being highly improper. --- Why in the world would someone use anything else but ordinary electrical installation wire for such installation?

Thus, Examiner has failed to identify a motivation (i.e., some beneficial expected result) sufficient to cause a person skilled in the art to seek to use a power track means for distributing power in Spira's lighting system.

Merely because a particular element <u>can</u> be used in combination with some other elements, thereby to attain the claimed invention, does not in any way mean that it would be <u>obvious</u> to use that particular element, especially not -- as here -- there is an alternative element that would be highly natural and reasonable to use.

In other words, Examiner has not identified any obvious benefit that would result from using a power track means for distributing the power in Spira's lighting system. And, of course, there can be no motivation in the absence of some expected beneficial result.

(b) Track lighting systems are usually used with incandescent lamps. Whereas there is a known efficacy-advantage associated with powering gas discharge lamps with high-frequency current (as described in Spira's column 1, lines 11-24), there is no known advantage associated with powering incandescent lamps with high-frequency current. Quite the contrary: there would be substantial added cost and significant efficiency-penalty associated with converting 60 Hz power line voltage to a high-frequency current; yet, in case of incandescent lamps, there would be no obvious functional advantage to offset this added cost and reduced efficiency.

Hence, except under very special conditions, there exists no obvious motivation for powering incandescent lamps with high-frequency current.

(c) Examiner takes the position that power track means, such as those of Galindo, are <u>equivalent</u> to the power distribution means used in Spira's lighting system.

This position is erroneous.

Power tracks are very special power distribution means. To use power tracks for connection with lighting <u>fixtures</u>, such as any of the lighting fixtures indicated by Spira, would be highly unusual -- to say the least. Power tracks are expressly adapted to be used with <u>disconnectable</u> lighting units; whereas lighting <u>fixtures</u> are (by definition) non-disconnectable. Moreover, because they are not totally enclosed, power tracks would not be permitted by the National Electrical Code to be used in substitution for ordinary conduited power lines; which is usually what is used for distributing electric power to lighting fixtures in a lighting system.

Thus, a power track means can not in any reasonable way be considered as being equivalent to the power distribution means used in Spira's lighting system

(d) The priority date of the invention herein claimed by Applicant is March 1, 1983. Thus, especially with Applicant and Nilssen being one and the same person, it is not appropriate for Examiner to apply Nilssen '318 (priority date 04/22/83; issue date 03/19/85), nor Nilssen '525 (priority date 05/17/85; issue date 12/19/89).

(e) Applicant has had two persons (each one having at least ordinary skill in the art pertinent hereto) consider the applied references and obvious modifications thereof. Each of these two persons, being expressly familiar with the teachings of both Spira and Galindo, was asked to carefully study and consider the Spira reference and to identify each and every instance of what -- in view of published art known to him (such as Galindo) -- he would consider as a desirable obvious modification and/or adaptation of Spira's teachings.

Neither of the two persons identified the invention claimed by Applicant as being one of those modifications and/or adaptations; which finding is conveyed via Exhibits A and B, wherein each of the two persons swears to his expertise as well as his conclusions.

Thus, twice over, Applicant has provided hard evidence to the effect that a person having ordinary skill in the pertinent art does <u>not</u> find the claimed invention to constitute obvious subject matter; which, in accordance with 35 USC 102/103, means that Applicant is plainly entitled to a patent for his invention.

CONCLUDING REMARKS

The new claims herein presented are all carefully constructed so as to be patentable over the cited art.

However, if Examiner were to disagree by way of a "103" rejection, Applicant asks of Examiner to carefully explain and justify his position, thereby to make it reasonably possible for Applicant to present Examiner's position to experts for analysis and evaluation. In particular, Applicant requests Examiner to carefully and completely follow each and every provision of MPEP 706.02, and to present his arguments in a manner that would be readily understandable by a person having ordinary skill in the art pertinent hereto.

To cover the fee for the additional claims, a check (#3506) for \$36.00 is enclosed.

Also, Applicant directs Examiner's attention to U.S. Patent Nos. 4,591,764 and 4,688,154, both to Nilssen; which patents Examiner might possibly find relevant to instant examination.

Ole K. Nilssen, Pro Se Applicant

708-658-5615



- 1. An arrangement comprising:
- a source providing a power line voltage between a first and a second power line terminal;
- a power track having a first and a second track conductor; the power track being operative to receive and hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when the one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being operative to convert the power line voltage provided between the power line terminals to a track voltage provided between the track conductors; there being, through the voltage conditioner means, an electrical conduction path between the first track conductor and one of the power line terminals; the fundamental frequency of the track voltage being substantially higher than that of the power line voltage.

- 2. The arrangement of claim 1 wherein the absolute instantaneous magnitude of the track voltage is substantially equal to that of the power line voltage during a significant part of each half-cycle of the power line voltage.
- 3. The arrangement of claim I wherein the first track conductor is, via action occurring within the voltage conditioner means, alternatingly and periodically switched between the first and the second power line terminal at the frequency of the track voltage.
- 4. The arrangement of claim 1 wherein the first track conductor is, via action taking place within the voltage conditioner means, periodically connected with the first power line terminal; such that, while such connection is taking place, the electrical potential of the first track conductor is substantially the same as that of the first power line terminal.

5. An atrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) repeatedly and periodically to connect for a brief period of time the first track conductor with the first power line terminal, and (ii) in such manner as to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.

6. The arrangement of claim 5 wherein the brief period of time has a duration that is approximately equal to half that of the fundamental period of the track voltage.

7. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

a power track having a first and a second track conductor; the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being characterized by functioning: (i) periodically and alternatingly to cause electrical connection between the first track conductor and the first and second power line terminals, and (ii) to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage.

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\8. An arrangement comprising:

a source providing a power line voltage between a first and a second power line terminal;

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a power track having a first and a second track conductor the power track being operative to receive and releaseably hold a number of track lighting units; each one track lighting unit having a pair of load terminals; which load terminals, when said one track lighting unit has been received and is indeed being held by the power track, make electrical connection with the track conductors; and

voltage conditioner means connected in circuit between the power line terminals and the track conductors; the voltage conditioner means being: (i) operative to provide between the track conductors a track voltage having a fundamental frequency substantially higher than that of the power line voltage, and (ii) characterized by causing the electrical potential of the first track conductor to be substantially equal to that of the first power line terminal during a significant portion of each half-cycle of the track voltage.

9. An arrangement comprising:

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power track means having track conductors and track receptacle means; the power track means being mounted on a ceiling and connected in circuit with the power line voltage of an ordinary electric utility power line;

plural track lighting units; each track lighting unit having connection means removably inserted into the track receptacle means, such as to be disconnectably held thereby; each track lighting unit having power input terminals and power output terminals; the power input terminals of each given track lighting unit being connected with the track conductors as long as the connection means of that given track lighting unit is indeed inserted into the track receptacle means; the power output terminals of at least one track lighting unit being connected with a low voltage incandescent lamp requiring for its proper operation to be supplied with a lamp voltage having RMS magnitude substantially lower than that of the power line voltage; and

frequency conversion means connected in circuit between the power line and the incandescent lamp in such manner as to be functional to supply to the low voltage incandescent lamp a voltage having RMS magnitude substantially lower than that of the power line voltage and frequency substantially higher than that of the power line voltage;

whereby the low voltage incandescent lamp is indeed properly powered.

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- 10. The arrangement of claim 9 wherein the lamp voltage is further characterized by periodically varying in magnitude between substantially zero and a certain peak level; the periodic magnitude variations having a fundamental frequency equal to twice the frequency of the power line voltage.
- 11. The arrangement of claim 9 wherein, whenever it is indeed being supplied, the lamp voltage has an absolute instantaneous magnitude that varies in proportion with that of the power line voltage.
 - 12. An arrangement characterized by:
 - (A) comprising:

a power track having a receptacle slot; and

plural lighting units, each disconnectably attached to the power track via the receptacle slot; at least one of the lighting units having an incandescent lamp requiring for its proper operation to be supplied with a lamp voltage having RMS magnitude substantially lower than that of the power line voltage present on an ordinary electric utility power line;

as well as by:

(B) being:

powered from said ordinary electric utility line;

and

operative to supply to the incandescent lamp a voltage of RMS magnitude substantially lower than that of the power line voltage and fundamental frequency substantially higher than that of the power line voltage, thereby to properly power the incandescent lamp.

- 13. The arrangement of claim 12 wherein the lamp voltage actually supplied to the incandescent lamp has a fundamental frequency higher than about 10 kHz and a magnitude that varies periodically in synchronism as well as in proportion with the instantaneous absolute magnitude of the power line voltage.
- 14. The arrangement of claim 12 further characterized by comprising frequency-converting means so disposed and operated as to provide a track voltage of frequency substantially higher than that of the power line voltage across a pair of track conductors in the power track.